ELSEVIER

Forensic Science International
Vol. 219, Nos. 1–3, 10th June 2012

Forensic Science International

www.elsevier.com/locate/forsciint

Contents

Abstracted in: *Biological Abstracts: Bulletin Signaletique: CABS (Current Awareness in Biological Sciences); Cambridge Scientific Abstracts; Chemical Abstracts: Criminology, Penology and Police Science Abstracts; Current Contents; EMBASE/Excerpta Medica; Medline/Index Medicus; National Criminal Justice Reference Service; Police Science Abstract; Science Citation Index; PubMed; Scopus.*

Review Article

Impairment based legislative limits for driving under the influence of non-alcohol drugs in Norway
V. Vindenes, D. Jordbru, A.-B. Knapskog, E. Kvan, G. Mathisrud, L. Slørdal and J. Mørland 1–11

Research Articles

Chemical enhancement of soil based footwear impressions on fabric
K.J. Farrugia, H. Bandey, L. Dawson and N. Nic Daéid 12–28

Concentrations of trace element in human dentin by sex and age
A. Kumagai, Y. Fujita, S. Endo and K. Itai 29–32

Molecular autopsy in young sudden cardiac death victims with suspected cardiomyopathy
M.K. Larsen, P.H. Nissen, K.E. Berge, T.P. Leren, I.B. Kristensen, H.K. Jensen and J. Banner 33–38

Detection of fingermarks by colloidal gold (MMD/SMD) – beyond the pH 3 limit
A. Becue, A. Scoundrianos and S. Moret 39–49

Nature, frequency and duration of genital lesions after consensual sexual intercourse—Implications for legal proceedings
B.S. Astrup, P. Ravn, J. Lauritsen and J.L. Thomsen 50–56

Spatial patterning of vulture scavenged human remains
M.K. Spradley, M.D. Hamilton and A. Giordano 57–63

Raman spectroscopy and laser desorption mass spectrometry for minimal destructive forensic analysis of black and color inkjet printed documents
L. Heudt, D. Debois, T.A. Zimmerman, L. Köhler, F. Bano, F. Partouche, A.-S. Duwez, B. Gilbert and E. De Pauw 64–75

Fundamental studies of bloodstain formation and characteristics
C.D. Adam 76–87

Comparison of quantitative PCR and culture-based methods for evaluating dispersal of *Bacillus thuringiensis* endospores at a bioterrorism hoax crime scene
T. Crighton, R. Hoile and N.V. Coleman 88–95

Quantitative determination of sibutramine in adulterated herbal slimming formulations by TLC-image analysis method
P. Phattanawasin, U. Sotanaphun, T. Sukwattanasinit, J. Akkarawaranthorn and S. Kitchaiya 96–100

Evaluation of the catalytic decomposition of H_2O_2 through use of organo-metallic complexes – A potential link to the luminol presumptive blood test
T.J. Soderquist, O.M. Chesniak, M.R. Witt, A. Paramo, V.A. Keeling and J.J. Keleher 101–105

Real-time PCR detection and quantification of elephantid DNA: Species identification for highly processed samples associated with the ivory trade
K.M. Wozney and P.J. Wilson 106–112

Experimental study of the expansion dynamic of 9 mm Parabellum hollow point projectiles in ballistic gelatin
F. Bresson, J. Ducouret, J. Peyré, C. Maréchal, R. Delille, T. Colard and X. Demondion 113–118

A study of the evaporation of a solvent from a solution—Application to writing ink aging
A.A. Cantú 119–128

Score-based likelihood ratios for handwriting evidence
A.B. Hepler, C.P. Saunders, L.J. Davis and J. Buscaglia 129–140

Application of Kvaal et al.'s age estimation method to panoramic radiographs from Turkish individuals
H.Ö. Erbudak, M. Özbek, S. Uysal and E. Karabulut 141–146

Mineralization of mandibular third molars can estimate chronological age—Brazilian indices
F.T. de Oliveira, A.L.Á. Capelozza, J.R.P. Lauris and I.R.F.R. de Bullen 147–150

(Contents continued on page BM I)

0379-0738(20120610)219:1/3;1-A

08021

(Contents continued from outside back cover)

The PMMA epidemic in Norway: Comparison of fatal and non-fatal intoxications
M. Vevelstad, E.L. Øiestad, G. Middelkoop, I. Hasvold, P. Lilleng, G.J.M. Delaveris, T. Eggen, J. Mørland and M. Arnestad 151–157
Dental age estimation from the developmental stage of the third molars in western Chinese population
G. Li, J. Ren, S. Zhao, Y. Liu, N. Li, W. Wu, S. Yuan and H. Wang 158–164
Detection of drugs of abuse in simultaneously collected oral fluid, urine and blood from Norwegian drug drivers
V. Vindenes, H.M.E. Lund, W. Andresen, H. Gjerde, S.E. Ikdahl, A.S. Christophersen and E.L. Øiestad 165–171
Screening and quantification of antipsychotic drugs in human brain tissue by liquid chromatography–tandem mass spectrometry: Application to postmortem diagnostics of forensic interest
M.C. Sampedro, N. Unceta, A. Gómez-Caballero, L.F. Callado, B. Morentin, M.A. Goicolea, J.J. Meana and R.J. Barrio 172–178
Quantitative analysis of methamphetamine in hair of children removed from clandestine laboratories – Evidence of passive exposure?
T. Bassindale 179–182
Informing the judgments of fingerprint analysts using quality metric and statistical assessment tools
G. Langenburg, C. Champod and T. Genessay 183–198
Anabolic androgenic steroids in police cases in Sweden 1999–2009
Y. Lood, A. Eklund, M. Garle and J. Ahlner 199–204
Maximum flight velocity of blood drops in analysing blood traces
B.P. Kneubuehl 205–207
Styryl dye coated metal oxide powders for the detection of latent fingermarks on non-porous surfaces
S. Chadwick, P. Maynard, P. Kirkbride, C. Lennard, A. McDonagh, X. Spindler and C. Roux 208–214
Volatile organic compounds released by blowfly larvae and pupae: New perspectives in forensic entomology
C. Frederickx, J. Dekeirsschieter, Y. Brostaux, J.-P. Wathelet, F.J. Verheggen and E. Haubruge 215–220
Three-dimensional computer-assisted craniometrics: A comparison of the uncertainty in measurement induced by surface reconstruction performed by two computer programs
P. Guyomarc'h, F. Santos, B. Dutailly, P. Desbarats, C. Bou and H. Coqueugniot 221–227
Morphology of preimaginal stages of *Calliphora vicina* Robineau-Desvoidy, 1830 (Diptera, Calliphoridae): A comparative study
N. Ubero-Pascal, R. López-Esclapez, M.-D. García and M.-I. Arnaldos 228–243
Bilateral fractures of transverse processus: A diagnostic sign of overrun?
V. Martos and C. Jackowski 244–247
A study of quantitative comparisons of photographs and video images based on landmark derived feature vectors
K.F. Kleinberg and J.P. Siebert 248–258
Evaluation of human brain damage in fatalities due to extreme environmental temperature by quantification of basic fibroblast growth factor (bFGF), glial fibrillary acidic protein (GFAP), S100β and single-stranded DNA (ssDNA) immunoreactivities
Q. Wang, T. Ishikawa, T. Michiue, B.-L. Zhu, D.-W. Guan and H. Maeda 259–264
Evaluation of postmortem redistribution phenomena for commonly encountered drugs
E. Han, E. Kim, H. Hong, S. Jeong, J. Kim, S. In, H. Chung and S. Lee 265–271
The first international proficiency test on ketamine and norketamine in hair
V.W.M. Lee, J.Y.K. Cheng, S.T.C. Cheung, Y.-c. Wong and D.W.M. Sin 272–277
Sarcomeric gene mutations in sudden infant death syndrome (SIDS)
M. Brion, C. Allegue, M. Santori, R. Gil, A. Blanco-Verea, C. Haas, C. Bartsch, S. Poster, B. Madea, O. Campuzano, R. Brugada and A. Carracedo 278–281

Online extra

Forensic Anthropology Population Data
Midline facial soft tissue thickness database of Turkish population: MRI study
S. Sipahioğlu, H. Ulubay and H.B. Diren 282–282
Estimation of stature from static and dynamic footprints
S. Reel, S. Rouse, W. Vernon OBE and P. Doherty 283–283
Adult Fanniidae associated to pig carcasses during the winter season in a semiarid environment: Initial examination of their potential as complementary PMI indicators
F.H. Aballay, M.C. Domínguez and F. Fernández Campón 284–284
Sex assessment using measurements of the first lumbar vertebra
W.X. Zheng, F.B. Cheng, K.L. Cheng, Y. Tian, Y. Lai, W.S. Zhang, Y.J. Zheng and Y.Q. Li 285–285
Do century-specific equations provide better estimates of stature? A test of the 19–20th century boundary for the stature estimation feature in Fordisc 3.0
J. Albanese, S.E. Osley and A. Tuck 286–286
Estimation of age at death from the pubic symphysis and the auricular surface of the ilium using a smoothing procedure
R. Martins, P.E. Oliveira and A. Schmitt 287–287
Analyses of sexual dimorphism of reconstructed pelvic computed tomography images of contemporary Japanese using curvature of the greater sciatic notch, pubic arch and greater pelvis
H. Biwasaka, Y. Aoki, K. Sato, T. Tanijiri, S. Fujita, K. Dewa, K. Yoshioka and M. Tomabechi 288–288
Diploe thickness and cranial dimensions in males and females in mid-Anatolian population: An MRI study
V. Sabancıoğulları, M.İ Koşar, İ Şalk, F.H. Erdil, İ Öztoprak and M. Çimen 289–289
Estimating sex of the human skeleton based on metrics of the sternum
R. Bongiovanni and M.K. Spradley 290–290

Additional material available online.

Case Reports

Foreign object ingestion in complex suicide: A case report and review of the literature
F. Cascini, F. Longo, M. Polacco and I. Scafetta e1–e3
Identification process in mass graves from the Spanish Civil War II
L. Ríos, A. García-Rubio, B. Martínez, A. Alonso and J. Puente e4–e9
The modern holy shroud
B. Schrag, S. Pitteloud, B. Horisberger, T. Fracasso and P. Mangin e10–e12
First practical applications of eye temperature measurements for estimation of the time of death in casework. Report of three cases
M. Kaliszan e13–e15
Fatal hypernatraemia after laparoscopic treatment of hydatid liver cyst: Medical and legal concerns of a rare complication
M. Michalodimitrakis, D. Nathena, A. Mavroforou, A. Papavdi and E.F. Kranioti e16–e18
Managing commingled remains from mass graves: Considerations, implications and recommendations from a human rights case in Chile
C. Garrido Varas and M. Intriago Leiva e19–e24
The use of moxibustion scars in the identification of individuals in forensic medicine
M. Sakabe, D. Miyamori, S. Mclean, N. Shinmen, H. Kato, K. Yoshimoto and H. Ikegaya e25–e28
Establishing forensic search methodologies and geophysical surveying for the detection of clandestine graves in coastal beach environments
J.K. Pringle, C. Holland, K. Szkornik and M. Harrison e29–e36
Factitious disorder comorbid with bipolar I disorder. A case report
A. Del Casale, S. Ferracuti, C. Rapinesi, D. Serata, A. Simonetti, M. Caloro, P. Roma, V. Savoja, G.D. Kotzalidis, G. Sani, R. Tatarelli and P. Girardi e37–e40

Additional material available online.